

August 11, 2005

The Honorable George V. Voinovich, Chairman  
Subcommittee on Clean Air, Climate Change,  
and Nuclear Safety  
Committee on Environment and Public Works  
United States Senate  
Washington, D.C. 20510

Dear Mr. Chairman:

The Fiscal Year (FY) 2005 Energy and Water Development Appropriations Act, House Reports 108-554 and 108-792, directed the U.S. Nuclear Regulatory Commission (NRC) to continue to provide a monthly report on the status of its licensing and other regulatory activities. The initial reporting requirement arose in the FY 1999 Energy and Water Development Appropriations Act, Senate Report 105-206. On behalf of the Commission, I am pleased to transmit the seventy-ninth report, which covers the month of June 2005. I am also providing more recent information in this cover letter in order to keep you fully and currently informed of NRC's licensing and regulatory activities.

The previous report provided information on a number of significant activities. These activities included the following items: (1) approval of power uprates for five nuclear power plant units since last June, resulting in a combined increase of approximately 245 megawatts-electric, and current reviews of power uprates for 11 nuclear power plant units; and (2) restoration of approximately 70,000 non-docket documents in the Agencywide Documents Access and Management System Public Library.

I would like to provide you an update on some of the agency's security activities. During the week of July 5, 2005, the NRC began conducting site-specific spent fuel pool assessments. The NRC is conducting these assessments to identify additional mitigation strategies to enhance the spent fuel pool cooling safety function under severe circumstances challenging the functional capabilities of the plant. Nine plant assessments were completed during July 2005 and an additional twenty-four assessments are scheduled to be conducted during August 2005. The spent fuel pool assessments for the remainder of the operating reactors will be completed by the end of the calendar year. In addition, the NRC is continuing with the structural analyses of two spent fuel pools to provide added assurance of spent fuel pool structural safety margin. These analyses will also be completed by the end of the calendar year.

The NRC performed the first three of twelve planned inspections of material control and accounting programs for spent fuel at nuclear power plants. All twelve inspections are scheduled for completion by the end of November 2005. The staff is also analyzing licensees' responses to NRC Bulletin 2005-01, "Material Control and Accounting at Reactors and Wet Spent Fuel Storage Sites," dated February 11, 2005. In a related matter, on June 22, 2005, the NRC issued a Notice of Violation to Entergy Nuclear Operations, Inc., for temporarily losing track of two spent fuel rod pieces at the Vermont Yankee nuclear power plant. Following an intensive search for the pieces, Entergy found them in the spent fuel pool at the facility last year. Reviews determined the fuel pieces never left the pool but were in a location not consistent with plant records. The NRC has characterized the violation as Severity Level III. Entergy took numerous steps to correct the violation and prevent a recurrence.

Beginning in July, NRC commenced support of the Department of Homeland Security Domestic Nuclear Detection Office (DNDO) with two NRC staff located at DNDO's offices. DNDO was tasked under Homeland Security Presidential Directive #7 with the development and implementation of a nation-wide system to detect domestic radiological shipments to help prevent their malevolent use by terrorist organizations.

Recently, the agency also accomplished the following:

- issued on June 6, 2005, Regulatory Issue Summary (RIS) 2005-08, "Endorsement of Nuclear Energy Institute (NEI) Guidance *Range of Protective Actions for Nuclear Power Plant Incidents*." The RIS endorses the NEI guidance document as providing an acceptable range of early-phase protective actions that licensees may use in the event of a nuclear power plant incident. The NEI guidance document does not develop new guidance for protective actions; rather, it establishes an industry guideline using existing Federal guidance.
- conducted the third quarterly management meeting with USEC Inc. (USEC) on June 17, 2005, to discuss management issues related to the proposed American Centrifuge Plant (ACP) to be constructed and operated in Piketon, Ohio. The NRC indicated that due to the unavailability of the non-sensitive portions of the ACP application for about two months in late 2004 and USEC's delay in submitting some of its responses to NRC requests for additional information associated with the environmental review, the NRC's schedule for preparing its draft and final environmental impact statements had slipped by about two months to September 2005 and April 2006, respectively.
- participated during the week of June 20, 2005, in a nationwide Federal exercise (Pinnacle) to test continuity of operations plans and communications connectivity and to demonstrate that essential functions can be effectively conducted during threats and emergencies.

- held a public meeting with the Atomic Energy of Canada Limited, on July 7, 2005, to discuss the ACR-700 pressure tube codes, standards, and acceptance criteria. The meeting was a routine meeting associated with pre-application activities for the ACR-700 design certification.
- issued on July 18, 2005, Bulletin 2005-02, "Emergency Preparedness and Response Actions for Security-Based Events," to commercial nuclear power reactor licensees. The bulletin requested information on several components of licensees' emergency preparedness programs, including emergency classification levels, procedures for notifying NRC, on-site protective actions, on-site response organization augmentation, and drills and exercises. Several NRC studies have shown that the existing emergency planning basis can successfully deal with events, including those dealing with security. The agency recognizes that methods of communication and personnel protection for security-based events may differ from those for plant-related accidents. The NRC issued this bulletin so that it can be cognizant, for security-based events, of the emergency preparedness enhancements that have been made and those that are being planned.
- published on July 28, 2005, in the Federal Register (70 FR 43646), a proposed rule for public comment on implementation of a national tracking system for certain radioactive materials used for academic, medical, and industrial purposes. The proposed rule would require licensees to report information on the manufacture, transfer, receipt, or disposal of these sources of interest to an automated National Source Tracking System, which will be administered by the NRC. Each licensee would have to provide its initial inventory of nationally tracked sources to the National Source Tracking System and annually verify and reconcile the information in the system with the licensee's actual inventory. Once fully operational, the National Source Tracking System would help the NRC and Agreement States (the 33 states that have agreed with the NRC to regulate the medical and industrial uses of radioactive material) to conduct inspections and investigations, communicate nationally tracked source information to other government agencies, and verify legitimate ownership and use of nationally tracked sources. The NRC has developed and is maintaining an interim database of radioactive sources of interest for both NRC and Agreement State licensees. This database will be maintained until the National Source Tracking System is fully operational.
- published on July 22, 2005, in the Federal Register (70 FR 42395), a notice that the NRC has published the final supplemental environmental impact statement on the proposed renewal of the operating licenses for the Millstone Power Station, Units 2 and 3. The Millstone nuclear plant is located in Waterford, Connecticut, on Millstone Point between the Niantic and Thames rivers, approximately 40 miles southeast of Hartford. The NRC concluded in the final supplemental environmental impact statement that there are no environmental impacts that would preclude license renewal for an additional 20 years of operation.

-4-

Please do not hesitate to contact me if I may provide additional information.

Commissioner Jaczko did not participate in the development of this letter to the extent it deals with the Yucca Mountain project.

Sincerely,

*/RA/*

Jeffrey S. Merrifield  
Acting Chairman

Enclosure:  
Monthly Status Report on the Licensing Activities  
and Regulatory Duties of the U.S. NRC, June 2005

cc: Senator Thomas R. Carper

Identical letter sent to:

The Honorable George V. Voinovich, Chairman  
Subcommittee on Clean Air, Climate Change,  
and Nuclear Safety  
Committee on Environment and Public Works  
United States Senate  
Washington, D.C. 20510  
cc: Senator Thomas R. Carper

The Honorable Ralph M. Hall, Chairman  
Subcommittee on Energy and Air Quality  
Committee on Energy and Commerce  
United States House of Representatives  
Washington, D.C. 20515  
cc: Representative Rick Boucher

The Honorable Pete V. Domenici, Chairman  
Subcommittee on Energy and Water Development  
Committee on Appropriations  
United States Senate  
Washington, D.C. 20510  
cc: Senator Harry Reid

The Honorable David L. Hobson, Chairman  
Subcommittee on Energy and Water Development  
Committee on Appropriations  
United States House of Representatives  
Washington, D.C. 20515  
cc: Representative Peter Visclosky

The Honorable James M. Inhofe, Chairman  
Committee on Environment and Public Works  
United States Senate  
Washington, D.C. 20510  
cc: Senator James Jeffords

The Honorable Joe Barton, Chairman  
Committee on Energy and Commerce  
United States House of Representatives  
Washington, D.C. 20515  
cc: Representative John D. Dingell

MONTHLY STATUS REPORT ON THE  
LICENSING ACTIVITIES AND REGULATORY DUTIES OF THE  
UNITED STATES NUCLEAR REGULATORY COMMISSION

**JUNE 2005**

Enclosure

## TABLE OF CONTENTS<sup>1</sup>

I	Implementing Risk-Informed Regulations . . . . .	2
II	Revised Reactor Oversight Process . . . . .	2
III	Status of Issues in the Reactor Generic Issue Program . . . . .	2
IV	Licensing Actions and Other Licensing Tasks . . . . .	2
V	Status of License Renewal Activities . . . . .	9
VI	Status of Review of Private Fuel Storage, Limited Liability Corporation's Application for a License to Operate an Independent Spent Fuel Storage Installation on the Reservation of the Skull Valley Band of Goshute Indians . . . . .	10
VII	Enforcement Process and Summary of Reactor Enforcement by Region . . . . .	11
VIII	Power Reactor Security Regulations . . . . .	12
IX	Power Uprates . . . . .	13
X	Status of the Davis-Besse Nuclear Power Station . . . . .	14
XI	New Reactor Licensing . . . . .	14

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<sup>1</sup>Note: The period of performance covered by this report includes activities occurring between the first and last day of June 2005. The transmittal letter to Congress accompanying this report may provide more recent information in order to keep Congress fully and currently informed of NRC's licensing and regulatory activities.

## **I Implementing Risk-Informed Regulations**

The U.S. Nuclear Regulatory Commission (NRC) continues to make progress on tasks involving the use of probabilistic risk information in many areas; however, there were no reportable milestones scheduled or completed during the month of June 2005. The Commission is continuing to consider the staff's proposal to risk-inform 10 CFR 50.46, "Acceptance Criteria for Emergency Core Cooling Systems for Light-water Nuclear Power Plants."

## **II Revised Reactor Oversight Process**

The NRC continues to implement the Reactor Oversight Process (ROP) at all nuclear power plants. The NRC continues to meet with interested stakeholders on a periodic basis to collect feedback on the efficacy of the process and consider the feedback for future ROP refinements. Recent activities include the following:

- On June 21 - 22, 2005, NRC staff attended the industry-sponsored workshop on the mitigating systems performance index (MSPI). This second workshop was conducted to assist licensees in their efforts to develop the necessary data to implement MSPI. Areas of focus included a comparison and discussion of basis document materials (e.g., system boundaries, selected components, Fussell-Vesely values), data collection and input, and programs on probabilistic risk assessment technical adequacy.

## **III Status of Issues in the Reactor Generic Issue Program**

In June 2005, the NRC staff completed the technical analysis of generic safety issue (GSI)-80, "Pipe Break Effects on Control Rod Drive Hydraulic Lines in the Drywells of BWR Mark I and II Containments." GSI-80 involves a concern about the likelihood and effects of a Loss of Coolant Accident that could create the potential for recriticality when the reactor core is reflooded. The staff's findings are scheduled to be presented to the Advisory Committee on Reactor Safeguards in September 2005.

In June 2005, the NRC staff also completed the final regulatory analysis of generic safety issue GSI-189, "Susceptibility of Ice Condenser and Mark III Containments to Early Failure from Hydrogen Combustion During a Severe Accident," and issued a memorandum on June 14 to the Commission presenting its findings. GSI-189 addresses a concern about the probability of early containment failure in ice condensers as a result of hydrogen combustion events. The staff is preparing letters to the six affected licensees to obtain information on their voluntary actions to address related issues.

## **IV Licensing Actions and Other Licensing Tasks**

Operating power reactor licensing actions are defined as orders, license amendments, exemptions from regulations, relief from inspection or surveillance requirements, topical reports submitted on a plant-specific basis, notices of enforcement discretion, or other actions requiring NRC review and approval before they can be implemented by licensees. The fiscal year (FY) 2005 NRC Performance Plan incorporates three output measures related to licensing actions -- number of licensing actions completed per year, age of the licensing action inventory, and size of licensing action inventory.

Other licensing tasks for operating power reactors are defined as licensee responses to NRC requests for information through generic letters or bulletins, NRC responses to 10 CFR 2.206 petitions, NRC review of generic topical reports, responses by the Office of Nuclear Reactor Regulation to regional requests for assistance, NRC review of licensee 10 CFR 50.59 analyses and final safety analysis report updates, or other licensee requests not requiring NRC review and approval before they can be implemented by licensees. The FY 2005 NRC Performance Plan incorporates one output measure related to other licensing tasks -- number of other licensing tasks completed.

In FY 2004, several high priority activities, such as power grid reliability, changes to nuclear facility security plans, safeguards contingency plans, and guard force training and qualification plans, resulted in the NRC reprogramming resources to accommodate the additional work. One of the programs affected by the reprogramming of resources was operating power reactor licensing actions. As a result, at the end of FY 2004, the size of the licensing action inventory exceeded the goal of less than or equal to 1000, and the goal of completing at least 96 percent of the licensing actions in less than or equal to one year was not met. The effects of the reprogramming will continue into FY 2005 and FY 2006. The licensing actions inventory and timeliness goals for FY 2005 have been changed. Additional resources will be allocated in FY 2006 to work down the inventory and improve timeliness to meet the original timeliness and inventory goals.

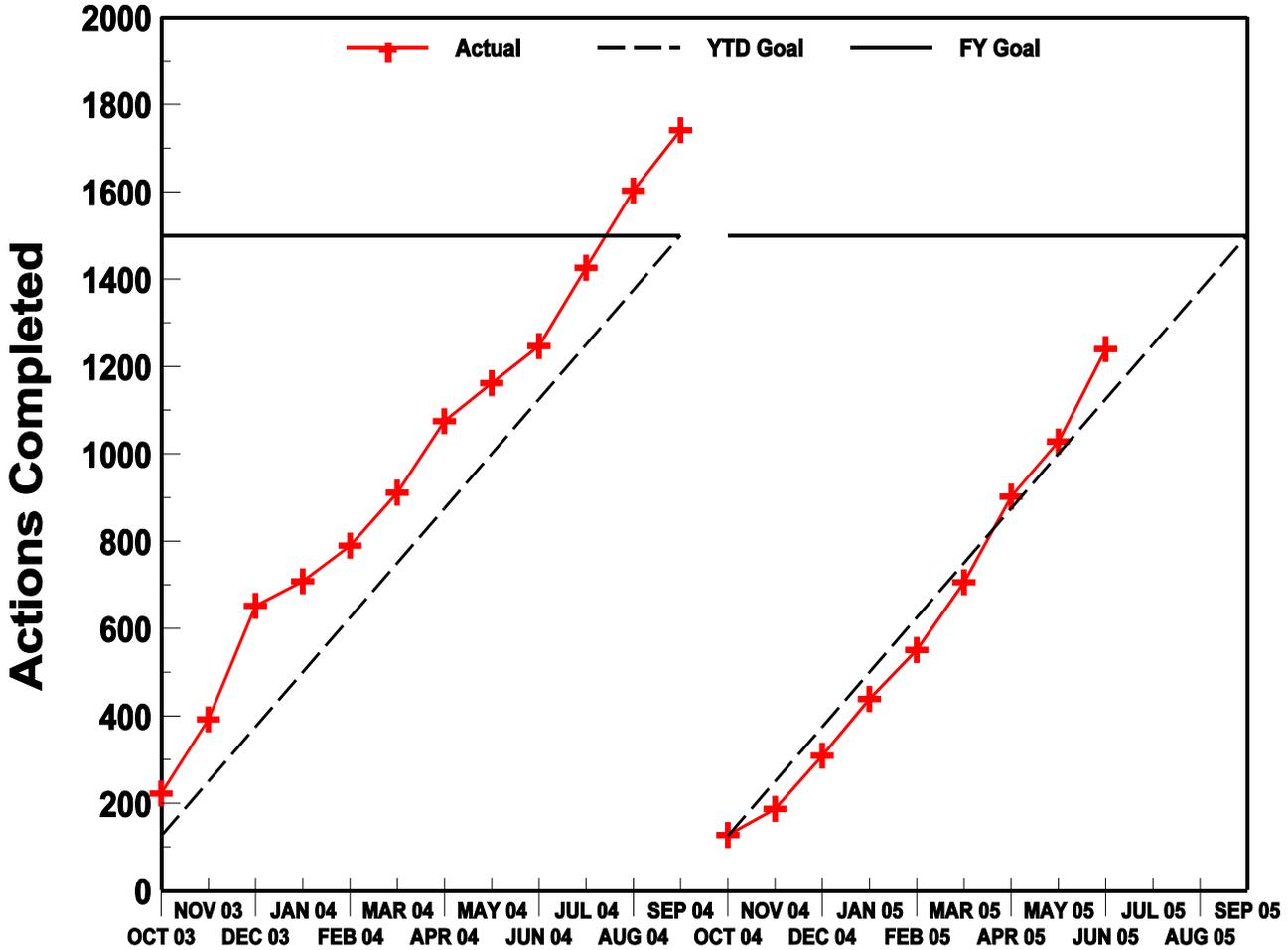
The actual FY 2003 and FY 2004 results, the FY 2005 goals, and the actual FY 2005 results, as of June 30, 2005, for the four NRC Performance Plan output measures for operating power reactor licensing actions and other licensing tasks are shown in the table below.

PERFORMANCE PLAN				
Output Measure	FY 2003 Actual	FY 2004 Actual	FY 2005 Goals	FY 2005 Actual (thru 06/30/2005)
Licensing actions completed/year	1774	1741	\$ 1500	1240
Age of licensing action inventory	96% # 1 year; and 100% # 2 years	91%# 1 year; and 100% # 2 years	90% # 1 year; and 100% # 2 years	86% # 1 year; and 98% # 2 years
Size of licensing action inventory	1296	1135	# 1200	1087
Other licensing tasks completed/year	500	671	\$ 500	487

The charts on the pages that follow demonstrate NRC's FY 2005 trends for the four operating power reactor licensing action and other licensing task output measure goals:

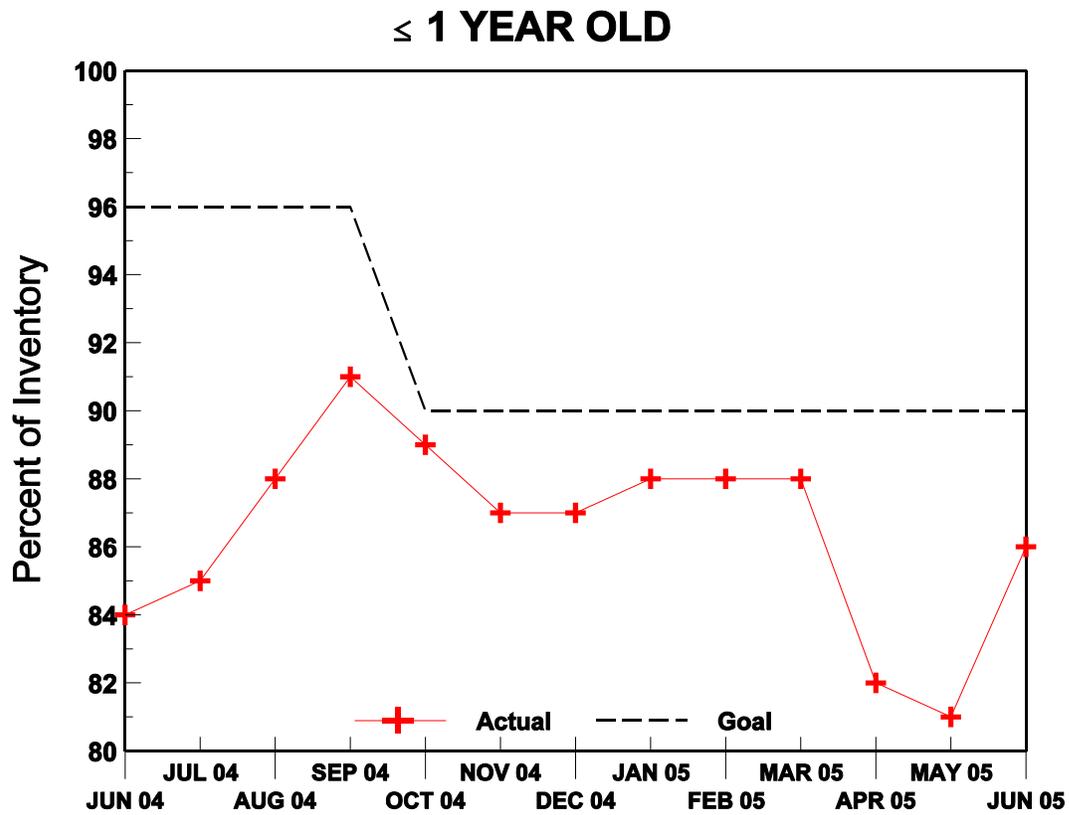
# Nuclear Reactor Safety - Reactor Licensing

Performance Plan Target: Completed Licensing Actions



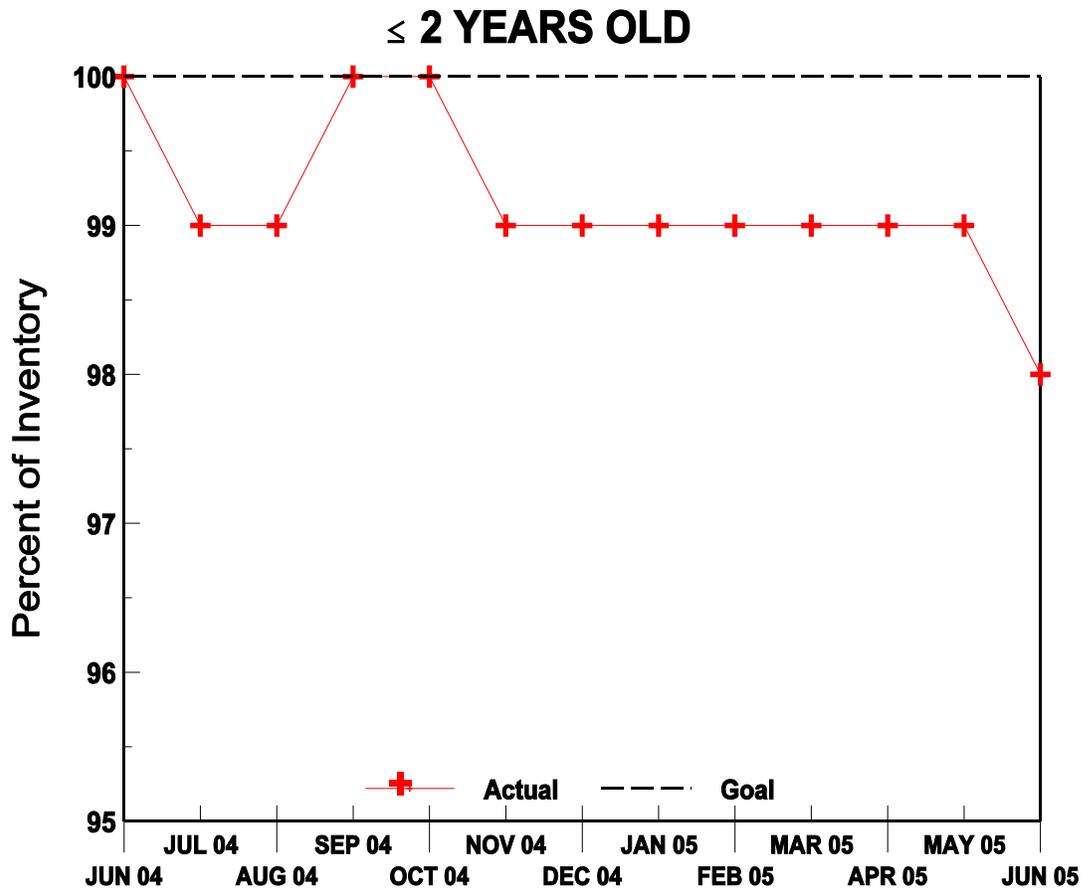
# Nuclear Reactor Safety - Reactor Licensing

Performance Plan Target: Age of Licensing Action Inventory



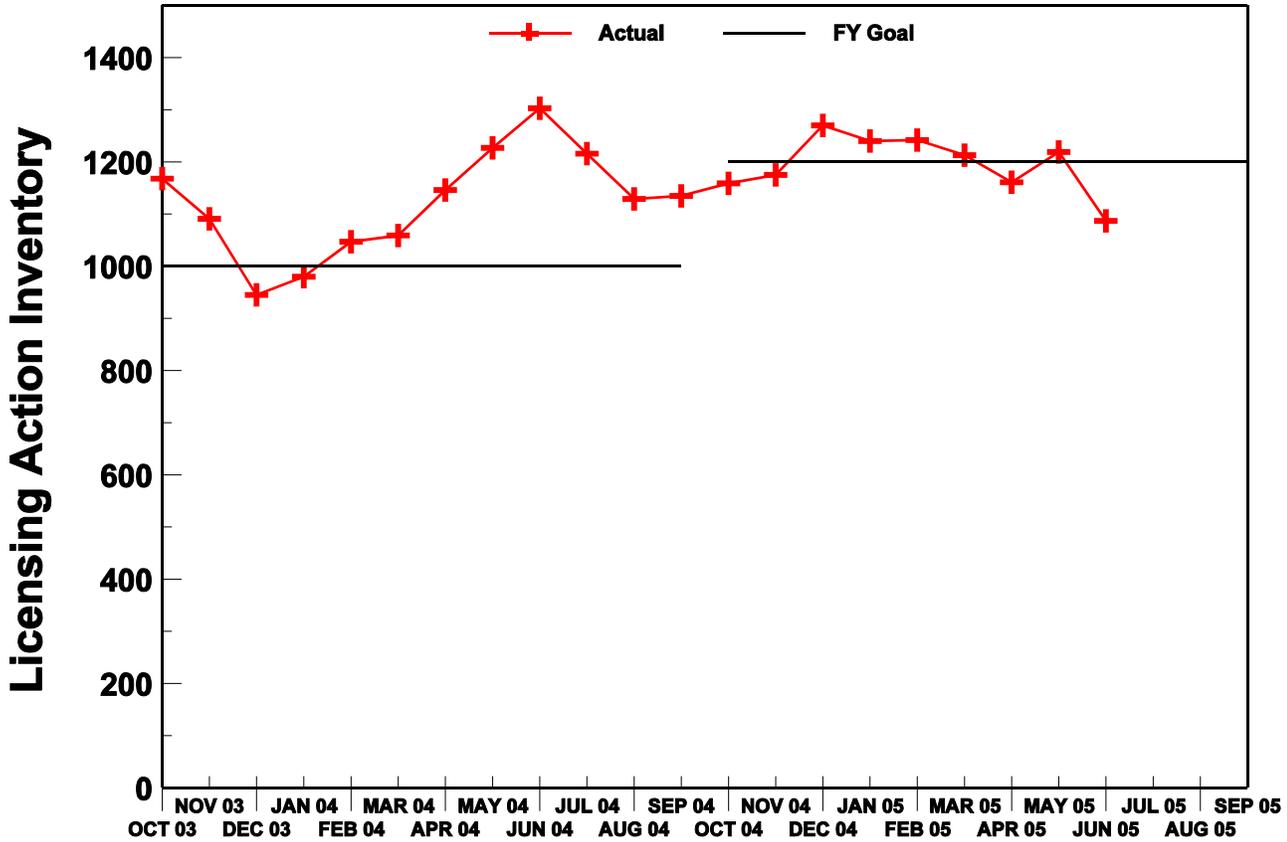
# Nuclear Reactor Safety - Reactor Licensing

Performance Plan Target: Age of Licensing Action Inventory



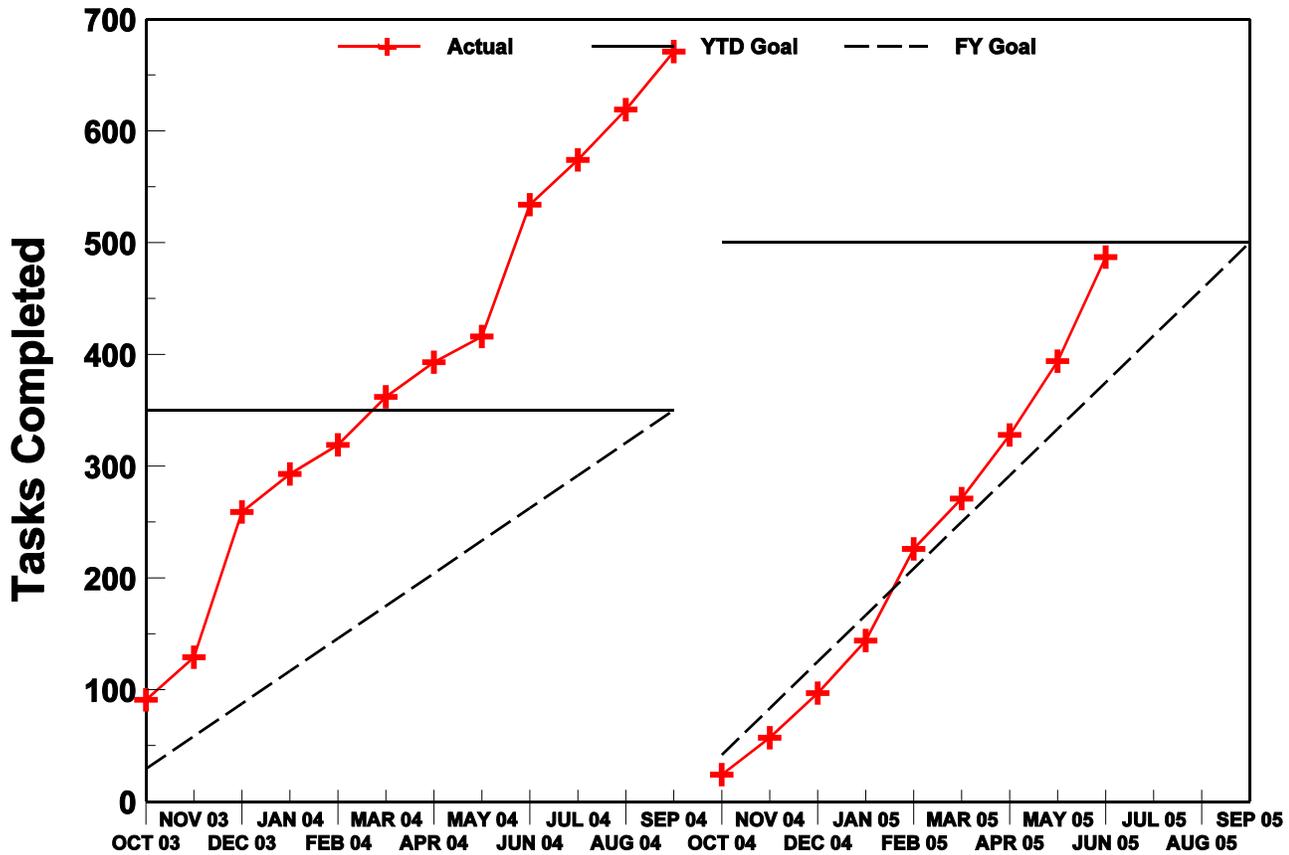
# Nuclear Reactor Safety - Reactor Licensing

## Performance Plan: Size of Licensing Action Inventory



# Nuclear Reactor Safety - Reactor Licensing

Performance Plan Target: Completed Other Licensing Tasks



## **V Status of License Renewal Activities**

### Arkansas Nuclear One, Unit 2, License Renewal Application

The renewed license for Arkansas Nuclear One, Unit 2, was issued on June 30, 2005, completing the review of the license renewal application 20.5 months after receipt and 1.5 months ahead of schedule.

### DC Cook, Units 1 and 2, License Renewal Application

The staff issued the final supplemental environmental impact statement (SEIS) in April 2005 and the safety evaluation report (SER) in May 2005. The staff is completing activities to support a decision on renewing the licenses in September 2005.

### Browns Ferry, Units 1, 2, and 3, License Renewal Application

The staff issued the final SEIS in June 2005. The draft SER, which will identify any remaining open items, is scheduled to be issued in August 2005.

### Millstone, Units 2 and 3, License Renewal Application

The draft SEIS was issued for public comment in December 2004, and the staff is addressing the comments received. The final SEIS is scheduled to be issued in July 2005. The draft SER, which will identify any remaining open items, was issued in February 2005. The applicant's responses to the open items were received in April 2005, and the staff is preparing to issue the SER in August 2005. A petition for late intervention and request for hearing was submitted in February 2005, and an Atomic Safety and Licensing Board (ASLB) has been established to preside over the proceeding.

### Point Beach, Units 1 and 2, License Renewal Application

The draft SEIS was issued for public comment in January 2005, and the staff is addressing the comments received. The final SEIS is scheduled to be issued in September 2005. The draft SER, which identified the remaining open items, was issued in May 2005, and the applicant's responses to the open items are due in July 2005.

### Nine Mile Point, Units 1 and 2, License Renewal Application

The review of the Nine Mile Point license renewal application is on hold. The application was submitted in May 2004, and the staff had been reviewing the application. The applicant was informed that the responses to the staff's requests for additional information and the applicant's level of support were not adequate, and the applicant requested that the review be placed on hold in order to address the issues. Assuming a satisfactory submittal, scheduled for July 2005, and adequate support from the applicant for staff review activities, the staff will resume the review and establish a new schedule to accommodate the additional time needed to complete the application review.

### Brunswick, Units 1 and 2, License Renewal Application

The Brunswick license renewal application is currently under review, and the staff is preparing requests for additional information. The draft SEIS is scheduled to be issued in September 2005, and the draft SER, which will identify any remaining open items, is scheduled to be issued in December 2005.

### Monticello License Renewal Application

The Monticello license renewal application is currently under review, and the staff is preparing requests for additional information. The draft SEIS is scheduled to be issued in February 2006, and the draft SER, which will identify any remaining open items, is scheduled to be issued in April 2006.

### Palisades License Renewal Application

On March 31, 2005, the NRC received an application for renewal of the operating license for the Palisades Nuclear Plant. The staff has completed its acceptance review and found the application acceptable for docketing and review. Until it is determined whether a hearing will be conducted, a 31 month review schedule has been established with a final decision on issuance of the renewed license scheduled for November 2007. As agreed upon by the applicant, an additional six weeks were added to the standard 30-month schedule due to the need for the applicant to supplement its original submittal, delaying the start of the review.

## **VI Status of Review of Private Fuel Storage, Limited Liability Corporation's Application for a License to Operate an Independent Spent Fuel Storage Installation on the Reservation of the Skull Valley Band of Goshute Indians**

Litigation continues on the application by Private Fuel Storage, L.L.C. (PFS) for a license to construct and operate an independent spent fuel storage installation on the Reservation of the Skull Valley Band of Goshute Indians in Skull Valley, Utah. As noted in previous monthly updates, the ASLB, on February 24, 2005, issued its decision on the aircraft crash issue in favor of the applicant, finding that the probability of an F-16 aircraft crash accident or ordnance impact into the facility that would result in a release of radioactive materials is less than  $1 \times 10^{-6}$ /yr (one in one million per year). Also, on February 24, 2005, the ASLB ruled that the State of Utah's late-filed Contention UU, alleging that the U.S. Department of Energy will not accept spent nuclear fuel from the proposed facility, lacked adequate factual foundation and was inadmissible.

On February 28, 2005, the Commission offered the parties an opportunity to comment on whether the Commission should direct issuance of an immediately effective license to PFS. The parties filed their comments. The matter of issuing a license to PFS is now before the Commission.

On March 16, 2005, the State of Utah filed a petition for Commission review of the ASLB's decision on Contention UU. On June 20, 2005, the Commission denied the State of Utah's petition for review of Contention UU. On May 24, 2005, the ASLB denied the State of Utah's motion for reconsideration of its aircraft crash decision. The State filed a petition with the

Commission for a review of the ASLB's aircraft crash decision on June 13, 2005. Responses to the State's Petition by PFS and the NRC Staff are due to be filed shortly.

## VII Enforcement Process and Summary of Reactor Enforcement by Region

Reactor Enforcement Actions						
		Region I	Region II	Region III	Region IV	TOTAL
Severity Level I	June 05	0	0	0	0	0
	FY 05 YTD Total	0	0	2	0	2
	FY 04 Total	0	0	0	0	0
	FY 03 Total	0	0	0	0	0
Severity Level II	June 05	0	0	0	0	0
	FY 05 YTD Total	0	0	2	0	2
	FY 04 Total	0	1	0	0	1
	FY 03 Total	0	0	0	0	0
Severity Level III	June 05	1	0	0	1	2
	FY 05 YTD Total	1	1	3	2	7
	FY 04 Total	1	2	4	0	7
	FY 03 Total	2	0	4	0	6
Cited Severity Level IV or GREEN	June 05	1	0	0	0	1
	FY 05 YTD Total	1	0	0	0	1
	FY 04 Total	1	0	2	2	5
	FY 03 Total	1	0	2	1	4
Non-Cited Severity Level IV or GREEN	June 05	1	0	9	7	17
	FY 05 YTD Total	188	133	195	224	740
	FY 04 Total	271	175	290	301	1037
	FY 03 Total	211	164	253	184	812

\* Numbers of violations are based on enforcement action tracking system data that may be subject to minor changes following verification. The numbers shown as Severity Level I, II, III or IV refer to the number of Severity Level I, II, III, and IV violations or problems. The monthly totals generally lag by 30 days due to inspection report and enforcement development.

Escalated Reactor Enforcement Actions Associated with the Reactor Oversight Process						
		Region I	Region II	Region III	Region IV	Total
Notices of Violation Related to RED, YELLOW, or WHITE Findings	June 05 RED	0	0	0	0	0
	June 05 YELLOW	0	0	0	0	0
	June 05 WHITE	0	0	0	0	0
	FY 05 YTD Total	3	1	0	1	5
	FY 04 Total	3	4	7	6	20
	FY 03 Total	6	1	7	1	15

### Description of Significant Actions Taken During June 2005

Arizona Public Service Company (Palo Verde) EA-05-037 - On June 27, 2005, a Notice of Violation was issued for a Severity Level III violation of 10 CFR 50.54(q). Specifically, the licensee made an emergency plan change regarding Emergency Action Levels that decreased the plan's effectiveness and did so without prior NRC approval. This violation was assessed in accordance with the NRC Enforcement Policy because making this plan change without NRC approval impacted the regulatory process.

Entergy Nuclear Operations, Inc. (Vermont Yankee) EA-04-174 - On June 22, 2005, a Notice of Violation was issued for a Severity Level III violation of 10 CFR 74.19 (a)(1), (b), and (c), [formerly 10 CFR 70.51 (b), (c), and (d)] citing the licensee's failure, between January 1980 and July 13, 2004, to ensure that two irradiated fuel rods were in the spent fuel pool as detailed in the licensee's inventory. The licensee also failed to conduct adequate inventories of the location of the two fuel pieces.

### VIII Power Reactor Security Regulations

In response to the terrorist attacks on September 11, 2001, the NRC and the nuclear industry have taken many actions to ensure the security at nuclear power plants. A series of Advisories, Orders, and Regulatory Issue Summaries have been and, as needed, continue to be issued to strengthen further the security of NRC-licensed facilities and control of nuclear materials.

Orders were issued on April 29, 2003, to supplement the threat against which individual power reactor licensees and category I fuel cycle facilities must be able to defend (design basis threat), limit the number of hours that security personnel can work, and enhance training and qualification requirements for security personnel. All licensees implemented the Orders by October 29, 2004.

Orders were issued on October 23, 2003, to all nuclear reactor licensees and research reactor licensees that transport spent nuclear fuel. The licensees subject to the Order have been issued a specific license by NRC authorizing the possession of spent nuclear fuel and a general license authorizing the transportation of spent nuclear fuel in a transport package approved by the Commission in accordance with the Atomic Energy Act of 1954, as amended, and 10 CFR Parts 50 and 71. The staff began implementation of a revised baseline inspection program to oversee the enhanced security requirements and the higher threat level. Inspection efforts are focusing on verifying implementation of the revised security plans.

In March 2003, the NRC initiated a pilot program for full force-on-force exercises, which used expanded adversary characteristics that were developed as a result of the increased post 9/11 threat. The purpose of the force-on-force exercises is to assess and improve, as necessary, performance of defensive strategies at licensed facilities.

To enhance the realism and effectiveness of the force-on-force exercises, the NRC has established fitness and training standards for mock adversary force personnel. Application of these standards provides assurance that the mock adversary force has received appropriate training in offensive tactics and is a credible and challenging adversary. The NRC retains responsibility for oversight of the mock adversary force and evaluation of licensee performance. In addition, measures have been established to minimize any possibility for a conflict of interest with respect to responsibilities for physical protection. To date, mock adversary force personnel have performed adequately in the force-on-force exercises they have participated in.

The NRC continues to support the U.S. Department of Homeland Security (DHS)/Homeland Security Council (HSC) initiative to enhance integrated response planning for power reactor facilities. The staff is continuing to work with HSC, DHS, Federal Bureau of Investigation and others to develop plans to address recommended actions. Additionally, the NRC completed six imminent aircraft threat announced walk-throughs with nuclear power plant licensees, and lessons learned have been incorporated into a Safeguards Advisory. Walk-throughs are scheduled to resume in September 2005, following updates to licensees' implementing procedures and NRC review of those procedures.

The staff is also developing EALs specifically for events involving credible imminent threats. The EAL development program includes plans to coordinate issues with other agencies and state and local governments.

## **IX Power Uprates**

The staff has assigned a high priority to power uprate license amendment reviews. The staff considers power uprate applications among the most significant licensing actions and is, therefore, conducting power uprate reviews on accelerated schedules.

There are three types of power uprates. A measurement uncertainty recapture (MUR) power uprate is a power uprate of less than 2 percent and is based on the use of more accurate feedwater flow measurement techniques. Stretch power uprates are power uprates that are typically on the order of less than 7 percent and are within the design capacity of the plant. Stretch power uprates require only minor plant modification. Extended power uprates (EPUs) are power uprates beyond the design capacity of the plant and, thus, require major plant modification.

Licensees have been applying for and implementing power uprates since the 1970s as a way to increase the power output of their plants. The staff has been conducting power uprate reviews since then and, to date, has completed 105 such reviews. Approximately 13,250 megawatts-thermal (4,417 megawatts-electric) or an equivalent of about four nuclear power plant units has been gained through implementation of power uprates at existing plants. The NRC staff currently has 11 plant-specific power uprate applications under review. The 11 applications under review include 3 MUR power uprates, 2 stretch power uprates, and 6 EPU's. The NRC staff is expecting to receive two additional applications for EPU's in the near term.

In January 2005, the staff completed a survey of nuclear power plant licensees to obtain information regarding the industry's plans related to power uprate applications. Based on this survey and information obtained since the survey, licensees plan to request power uprates for 28 nuclear power plant units in the next 5 years. Planned power uprates are expected to result in an increase of about 4,139 megawatts-thermal (1,379 MWe). In June 2005, staff performed a new survey and is currently compiling the results.

## **X Status of the Davis-Besse Nuclear Power Station**

Interim reports to be provided in September 2005, March 2006, and September 2006.

## **XI New Reactor Licensing**

The NRC expects to license the next generation of nuclear power plants using Part 52 to Title 10 of the *Code of Federal Regulations*, (10 CFR Part 52). 10 CFR Part 52 governs the issuance of standard design certifications, early site permits (ESP), and combined licenses for nuclear power plants.

### Design Certifications

General Electric is scheduled to submit its design certification application for the Economic and Simplified Boiling Water Reactor design during the summer of 2005. The reactor design review and accompanying rule issuance is scheduled to take 42 - 60 months to complete.

The NRC staff and Pebble Bed Modular Reactor (PBMR), (Pty.) Ltd., held a public meeting on June 30, 2005, to discuss planning for the PBMR pre-application review, including the proposed focus topics, the desired outcomes, review approach, schedule, and resource aspects.

### ESPs

The staff is currently reviewing three ESP applications. Dominion Nuclear North Anna, LLC, submitted an ESP application in September 2003 for its North Anna site located in Louisa County, Virginia. The final SER for the North Anna ESP was issued on June 16, 2005.

Exelon Generation Company, LLC submitted an ESP application in September 2003 for its Clinton site located in Harp Township, DeWitt County, Illinois. The staff issued the draft SER for the Clinton ESP on February 10, 2005, and the draft EIS on March 2, 2005. The final SER is scheduled to be issued in August 2005, and the final EIS is scheduled to be issued in October 2005.

System Energy Resources Inc., submitted an ESP application in October 2003, for its Grand Gulf site located in Claiborne County, Mississippi. On June 28, 2005, the NRC held a public meeting in Port Gibson, Mississippi, to discuss the draft EIS for Grand Gulf, which was issued on April 21, 2005. The final SER is scheduled to be issued in October 2005, and the final EIS is scheduled to be issued in December 2005.

In addition to the three ESP applications under staff review, the staff anticipates the submission of an ESP application from Southern Nuclear Operating Company (SNC) during the summer of 2006. SNC has not indicated for which site it will request an ESP.

#### Regulatory Infrastructure

The NRC is scheduled to meet with the Nuclear Energy Institute (NEI) on July 27, 2005, to discuss NEI 04-01, Revision D, "Draft Industry Guideline for Combined License Applicants Under 10 CFR Part 52," and the review of operational programs in a combined license application.

On October 24, 2005, the NRC staff is scheduled to issue a proposed rulemaking to revise 10 CFR Part 52. The changes to the rule are based on lessons learned during the previous design certification reviews and on discussions with external stakeholders about the ESP and combined operating license processes.